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LOYOLA UNIVERSITY CHICAGO

CHILDREN'S ADJUSTMENT TO DIVORCE OR DEATH OF A PARENT:
THE DEVELOPMENT OF A SELF-ESTEEM AND COPING MECHANISMS
MEASURE

A THESIS SUBMITTED TO
THE FACULTY OF THE GRADUATE SCHOOL
IN CANDIDACY FOR THE DEGREE OF
MASTER OF ARTS

DEPARTMENT OF COUNSELING PSYCHOLOGY

BY
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CHAPTER I

INTRODUCTION

According to the National Center for Health Statistics, 1,169,000 divorces were granted in 1995 (Monthly Vital Statistics Report, 1996). Separations and loss affect children's self-perceptions. Some programs have been developed to help these children cope with these life events. One such program is the Rainbow's for All God's Children, Inc.. There are currently 460,000 children and adolescents in Rainbow programs in nine countries.

Description of Rainbow's for All God's Children Program

The co-founders, Suzy Yehl Marta, a divorced mother herself, and Rev Medard Laz, piloted the first program called Rainbow's for All God's Children in three Catholic schools in April 1983. Rainbows is a not-for-profit, international organization that offers training and curricula for establishing peer support groups in churches, schools, and social agencies.

The rationale for the program is to allow children to express their feelings with other single-parent and step-family children. In addition, this program addresses the need for children to verbalize their fears and feelings with

caring adults who will gently listen and support them while they sort through their confusion and begin the healing process. According to the founders of the Rainbows program, the four key factors in the process of healing are: self-esteem, trust, God, and forgiveness.

The overall goal of the program is to "provide grieving children of all ages, religions, races, and colors with an understanding of their new family unit, to help build a sense of self-esteem, and to direct them to acceptance of the changes in their family." (Rainbows brochure)

The Rainbows program consists of 12 sessions divided into two six-week semesters and a Wrap-up day at the end of each semester. Small groups of children (3-5 in number) in similar age categories meet weekly and share an activity that focuses on a theme relating to the needs of children in single-parent and stepfamily homes. The twelve themes are: 1) Me, Myself, and I; 2) Inside Out; 3) Why my family?; 4) Making the Pieces Fit; 5) Blow Ups and Let Downs; 6) Phony Fears and Real Worries; 7) We are Family; 8) Where Do I Fit In?; 9) The Brady Bunch; 10) Endings and Beginnings; 11) Weathering The Storm; and, 12) Reaching Out.

Facilitators, including teachers or counselors, lead the group. Adults as well as children are bound by confidentiality which fosters trust and provides a safe atmosphere. According to the Rainbows' literature, children and adolescents who participate in the program experience

the following: trust (in oneself and others); fear, anger, guilt/self-blame; wishful thinking; denial, safety, acceptance, hurt, sadness/depression; and happiness.

Purpose of Study

The overall purpose of this Master's thesis research project was to develop a psychological instrument that will measure attributes of children separated as a consequence of divorce or death of a parent. The goal is to develop a measure that will assess these children prior to their enrollment in the Rainbows program. The measure will assess the following: coping mechanisms; self-esteem; certain qualities experienced by those in the given situation. Before their enrollment in the Rainbows Program, three tests will be administered. These tests include: the Rainbows Instrument which is being piloted; the Behavioral Academic Self-Esteem rating scale by Coopersmith and Gilberts (1979); and the school form of the Coopersmith Self-Esteem Inventory (1981). Scale reliability and exploratory factor analysis procedures will be used to evaluate the psychometric qualities of the Rainbows Instrument. In addition, pretest and posttest scores will be tested for significance on the instruments described above to determine their utility with respect to the efficacy of such a program.

Research Questions

- 1) How do children of divorce score in comparison to a normative data set on the Coopersmith Self-Esteem Inventory (SEI) and the Coopersmith/Gilberts Behavioral Academic Self-Esteem (BASE) rating scale?
- 2) Does the Rainbow Measure assess the feelings and coping mechanisms of children of divorce? How do children of divorce score on the Rainbows Measure?
- 3) How do the children of divorce pretest scores (prior to enrollment in the Rainbows Program) compare to their posttest scores (after enrollment in 12 sessions of the Rainbow program) on the three instruments including the SEI, the BASE, and the Rainbows Measure?
- 4) How reliable are the subscales of the Rainbows Measure?
- 5) Do the constructs intended to be measured by the Rainbows instrument, load on factors generated by exploratory factor analysis?

CHAPTER II

REVIEW OF LITERATURE

There have been numerous articles and studies related to the effects of divorce or loss of a parent or parents on children who experience such events in their lives. In her now classic work on death and dying, Elizabeth Kubler-Ross (1969) identified five stages of death (denial, bargaining, anger, depression and acceptance). Over the years this theory has been broadened to include not only the person dying but anyone who has experienced a loss. The Rainbows philosophy is that a child who experiences the loss of a parent through divorce or separation identifies with these stages.

Wallerstein and Kelly (1976) studied 31 latency aged children who were a subset of 131 children from 60 divorcing families. They summarized the central themes emerging from the child's experience as: frightening; a time of sadness and yearning; a time of worry; a time of feeling rejected; a lonely time; a time of conflicted loyalties; a time of anger; and a time of guilt. They also found that boys externalize their feelings and may have problems in school or home because they may act out and that girls internalize

their feelings and may become depressed or may withdraw.

In addition, Wallerstein (1984) conducted a longitudinal study with 34 preschool children of divorce and found that they experienced sadness, loneliness, reconciliation fantasies, anger toward both mother and father, concern about mother being a single-parent, and they were tuned into economic issues. Kalter (1990) stated that "risks to whole child development that appear linked to divorce include an increased probability of the following problems: (1) angry and aggressive behavior; (2) sadness, low self-esteem and depression; (3) impaired academic performance; and (4) trouble with intimate relationships in adolescence and adulthood." (p. 2)

Hoyt, Cowen, Pedro-Carroll & Alpert-Gillis (1990), compared 49 second and third grade children of divorce with a demographically matched sample of 83 children of intact families. They measured the childrens' level of depression and anxiety by assessments of their teachers, their parents and self-reports. Their finding confirmed that children of divorce experience a higher rate of depression and anxiety compared with those from an intact family.

Kurtz (1994) studied 61 children of divorce and matched them with 61 children from intact families on variables such as grade, sex, and school district. She found that children of divorced parents have lower levels of self-esteem, social support, and less effective coping styles. "Self-esteem may

be affected by negatively perceived guilt and blame in the aftermath of divorce". (p. 555) John Beer, (1989) in a sample of 61 children (33 5th graders and 28 6th graders), found that children of divorce scored significantly lower on self-concept and self-esteem tests (Piers-Harris Self-Concept Test and the Coopersmith Self-Esteem Inventory-school form) than those of nondivorced homes. In addition, children from divorced homes scored significantly higher on the Children's Depressions Inventory than those from nondivorced homes.

Kurdek and Berg (1987) used their scale to evaluate the children's beliefs about parental divorce. Their finding provided six subscales: peer ridicule and avoidance; parental blame; fear of abandonment; maternal blame, hope of reunification; and self-blame.

Chethik, Dolin, Davies, Lohr & Darrow (1987) found that "the affects evoked by divorce within the child are feelings of sadness, fears of abandonment, rage, loss of self-esteem (sense of worthlessness) and at times anxiety provoked by these affects are warded off by a 'negative identification'." (p. 137) Thiessen (1993) showed that the reactions of children of divorce vary according to age. These reactions included: abandonment; guilt; confusion; grief; fear; security; loyalty conflict; self-blame; shame; somatic symptoms; anger-blaming parent; acting out; denial; sadness; and withdrawal (p 20). Thiessen also stated that

"each time the child visits the other parent, these feelings are renewed and relived!" (p. 20)

In a two year longitudinal study, a sample of 121 white children in which their parents had recently separated, Healy et al. (1993) assessed them using the following: a questionnaire that categorized their reaction to the separation into blame and no blame groups; a Perceived Competence Scale; a Symptom Checklist; a questionnaire pertaining to Peer Relations; and an interview designed to address their school performance. The age range of the children was 6 to 13. At time 1, a third of the children expressed some feelings that the separation was partly their fault while at time 2 only 19% indicated self-blame. Children who blamed themselves for the divorce had lower perceived competence and more symptoms than children reporting no self-blame.

Crosbie-Burnett and Necomber (1990) stated that "school-based group counseling would seem to be an appropriate way of minimizing the effects of divorce." They listed several reasons for this: 1) financial & social reasons; 2) more efficient to counsel children in groups rather than individually; 3) as the children mature, they look to peers rather than adults; and 4) school is an appropriate place to address child's emotional, social, and academic development. (p. 70) They recommended that the number of divorce adjustment groups be set at a minimum of six sessions; with

eight to ten preferred and with each session lasting 50 minutes. It should be noted, however, that their sample size of 11 was very small. Six participants were in the experimental group and 5 participants were in a control group. The findings suggest that "group intervention had a significant positive effect on children's beliefs about parental divorce and on their level of depression" (p. 74).

Kalter, Pickar & Lewsowitz (1984) recommend that the goals of group intervention are to: "1) normalize the sense of being a child of divorce; 2) clarify divorce issues which can be confusing and upsetting; 3) provide a safe place for children to experience and rework emotionally painful aspects of divorce and post-divorce life; 4) develop coping strategies for particular troubled feelings and family interactions; and 5) share with parents the nature of the concerns fifth and sixth grade children have about divorce and its aftermath." (p. 614) The group consisted of 5-9 fifth and sixth graders and one male adult and one female adult. In addition, they identified several group themes, including: 1) anxiety over parental battles; 2) conflicted loyalties and uneasiness about possible changes in custody; 3) sadness over loss of the original family unit and subsequent minimal involvement with the noncustodial father; 4) excitement and anxiety regarding the custodial mother dating; and 5) anger directed toward both mother and mother's boyfriend or husband over being disciplined by the

new man in the home.

Teachers can help ease the pain, according to Carlile (1991) by knowing the children in the classroom, talking about feelings, using bibliotherapy, making children aware that they are not alone, modifying the use of language to include a variety of family structures, being tolerant of behavior changes and keeping open lines of communications with the parents. She also stated that schools must begin to support teachers by providing them with training and increase the budget to allow for enough guidance counselors at the elementary school level.

Healy, Stewart & Copeland (1993) conducted a longitudinal study with 121 white children ages 6-12 during the 18 months following the parental separation. Children who reported feelings of self-blame had lower perceived competence, more psychological symptoms, and more behavior problems.

Hetherington (1979) stated that "children's most early responses to divorce are anger, fear, depression and guilt". (p. 851) However, there is great variability in children's responses to the divorce. Some children appear to be unscarred by the divorce and other children experience severe stress. According to Heatherington, "the impact of marital discord and divorce is more pervasive and enduring for boys than for girls" (p. 853) Other factors influence that emotional stress on the child experiencing the divorce such

as: 1) economic changes and practical problems of living; 2) changes in the parent-child relationship; and 3) extrafamilial support systems (pp. 854-7).

A follow-up article 10 years later (Hetherington, Stanley-Hagan & Anderson, 1989) reinforces what Hetherington had stated. In addition, "more studies are focusing on the diversity of children's responses to their parents' marital transitions and on the factors that facilitate or disrupt the development and adjustment of children in the family situations." (p. 310).

Kelly and Wallerstein (1976) studied 26 children of divorce--14 boys and 12 girls all of latency age. They identified common feelings or experiences which included: sadness and grieving; fear; feelings of deprivation; fantasies of responsibility and reconciliation; and sense of loss for the departed father; anger at the custodial mother; conflicts of loyalty; and changes in school behavior. (pp. 23-29) "The divorce event is not the central factor in determining the outcome for the child, but rather, the divorce process, or chain of events set in motion by the separation." (p. 32)

Jolene Oppawsky (1991) studied 22 children (aged 22 months to 18 years) of parental divorce in West Germany. Taking into account the age range of the children of 6-12, she found these common reactions: feelings of hopelessness; helplessness; sadness; depression; anger; manifest or secret

wishes for reunification or longing for "a family"; increased aggression; bad thoughts; bad dreams; increased overert and secret crying and feelings of not being loved or being lovable (p. 300).

Judith Wallerstein (1990) stated that the initial responses of children are an overwhelming anxiety, sorrow, anger and overall heightened sense of their own vulnerability. (p. 211) In summation, Wallerstein suggested that preschool children feel that they are abandoned by one or both parents and caused the parent's departure through some misbehavior. For children aged 5-8, she stated that they show open grieving and often appear downcast and tearful, with feelings of rejection. Children aged 9-12 often become angry and blame the parent who is seeking the divorce. In addition, the children feel grief, anxiety, a sense of loneliness and a sense of their own powerlessness. (p. 212)

Wallerstein, (1983) in another article stated that feelings aroused by the separation include: "anger at one or both of the parents, profound and sometime pervasive sorrows, the sense of vulnerability, the concern of being unloved and perhaps unlovable, the yearning for the departed parent, the intense worry over parents, the loyalty conflict, the general sense of neediness and being overburdened, and the nostalgia for the intact family." She also suggested the following six tasks for children of divorce: 1) Acknowledging the Reality of the Marital

Rupture; 2) Disengaging From Parental Conflict and Distress and Resuming Customary Pursuits; 3) Resolution of Loss; 4) Resolving Anger and Self-Blame; 5) Accepting the Permanence of the Divorce; and 6) Achieving Realistic Hope Regarding Relationships. (p. 233)

Barr (1992), in the second chapter of her book, Children of Divorce, addressed how children respond to divorce. She dealt with five age groups: babies and toddlers; preschoolers (2-4 year olds); five to eight year olds; preteens (9-12 year olds); and teenagers. Barr stated that five to eight year olds experience sadness and disillusionment, loyalty conflict, fear of losing the custodial parent, a sense of responsibility, and a feeling of being deprived. According to Barr, preteens experience anger, alignment between the "good parent and bad parent" (p. 65) and become "little adults" (p. 67) by doing laundry, cooking meals, and going shopping. In addition, these children often have fantasies of reconciliation.

Guttmann (1993) provided a good summation of effects of divorce on child. He suggested a breakdown by three age groups: the preschool child; the latency-aged child; and adolescents. Fear, sadness, and anger manifested by regression, emotional neediness, dependency, clinging and increased aggression would describe the response of the preschool child to the divorce of their parents. Children experiencing divorce in early latency may be aware of their

anger but the feelings may get mixed up with loyalty and fear. In addition, latency-age children may be more vulnerable to isolation and/or alignment with one parent. Adolescents are faced with identity issues and the desire to separate from the family. While these are not exclusive to children of divorce, they experience difficulty in accomplishing these tasks successfully.

Demo and Acock, (1988) summarized the research of the last ten years. They focused their efforts on personal adjustment, self-concept, cognitive functioning, and antisocial behavior of children experiencing the divorce of their parents. In addition, they stated limitations to prior research such as nonrepresentativeness of samples, failure to control for income or social class, and a failure to examine contextual factors.

Amato and Keith (1991) in a meta-analysis of 92 studies comparing children from divorced and intact families found small but reliable differences between the adjustment of children from divorced and intact families. Although according to Kurdek (1987), many studies have methodological problems—including the use of small, nonrepresentative samples, lack of appropriate comparison groups, and inadequate measures of central constructs.

It is anticipated by assessing the Rainbows' program, we will better understand what these children experience in divorce and/or loss of a parent. This study was designed to

explore the feelings and effects this loss (whether it be divorce, death or separation of a parent) has on the child's self-esteem and coping mechanisms.

CHAPTER III

METHOD

Participants

The sample in the present study consisted of 67 children from 4 new sites for the Rainbow's for All God's Children program. The parents of all eligible children were contacted by a letter originating from the Rainbows site manager. Children were only eligible if informed consent was received from the parent or legal guardian. Anonymity and confidentiality of children were maintained with the identity of children to be known only by the site manager. The only identification on the test was the site number and the subject identification number. The age range of the children was between 5-14. The sample included 21 boys and 46 girls.

Procedure

The parent or legal guardian was asked to fill out a biographical data sheet(see Appendix A). The data sheet was coded with the corresponding site and subject identification numbers to maintain confidentiality and anonymity. The children were assessed by the facilitator using the Behavioral Academic Self-Esteem rating scale (Coopersmith and

Gilberts, 1979) (see Appendix B). In addition, the children took the school form of the Coopersmith Self-Esteem Inventory (1981) (see Appendix C). The children also took the Rainbows Instrument which is being piloted (see Appendix D). These three instruments were administered prior to new enrollment in the Rainbows program, and then again upon completion of the 12 week program. It should be noted that the data were collected in the fall of 1992.

Instruments

The Rainbows Measure

The Rainbows measure includes 56 items. Each question could be answered with the following responses: yes, sometimes, no, and does not apply (yes was coded a "3", sometimes was coded as a "2", no was coded as a "1" and does not apply and missing data were coded with the mean of each item).

Inverse coding was used where appropriate so that all questions would be coded in a positive direction (i.e., a positive score meant a more healthy response). There are twelve subscales. They include: anger; fear; hurt; sadness/depression; happy; trust (in oneself and in others); safety/security; denial; wishful thinking; self-blame/guilt; social support seeking; and family satisfaction/acceptance. The listing of the subscales and the items associated with each can be found in Table 1.

Table 1

Subscales and Items for the Rainbows Measure

Subscale	Items Associated with Subscale
<u>Anger</u>	3) I am angry. 19) I am mad at my dad. 25) I am angry because I have extra chores. 33) I am mad at my mom. 55) I feel angry because I live in a single-parent family.
<u>Fear</u>	9) I am afraid the parent I live with will leave me too. 12) I feel scared when I am alone. 15) I am not afraid. 30) I am afraid that something will happen to my mom. 47) I am afraid that something will happen to my dad. 56) I am afraid that we will not have enough money.
<u>Hurt</u>	4) It hurts me when I leave my mom. 17) It hurts me when someone in my family cries. 36) I feel hurt because my mom doesn't have time for me. 39) It hurts me when I leave my dad. 51) I feel hurt because my dad doesn't have time for me.
<u>Sadness/ Depression</u>	10) I feel like giving up. 13) I feel down. 20) I am sad. 24) I feel like things will never get better. 44) I feel like crying.
<u>Happy</u>	1) I feel happy. 23) I enjoy playing with my friends. 37) I'm having fun with my family. 52) My home life is working out ok.

Table 1 (continued)

Subscales and Items for the Rainbows Measure

Subscale	Items Associated with Subscale
<u>Trust</u>	2) I have someone older I can count on. 11) I trust my dad. 14) I have confidence in myself for making choices. 31) I can't depend on anything anymore. 38) I trust my mom. 45) I don't trust anyone.
<u>Safety/ Security</u>	6) I know who will take care of me everyday. 26) I feel safe. 46) I feel like there is no place for me to go. 50) I know what to do when my parent is late and I am alone.
<u>Denial</u>	5) I don't care about the changes in my family. 18) I don't think it is any different to live with only one parent. 29) I like to talk about the changes in my family. 42) I feel the change in my family is only temporary. 49) I think about my family problems.
<u>Wishful Thinking</u>	7) I wish my mom and dad were still together. 43) I think my mom and dad will get together again.

Table 1 (continued)

Subscales and Items for the Rainbows Measure

Subscale	Items Associated with Subscale
<u>Self-Blame/ Guilt</u>	<p>16) It is my fault that my mom is not with us anymore.</p> <p>22) I feel "in the way" when my mom has a date.</p> <p>27) I think my parent left because of something I did.</p> <p>28) If I were better, my dad would be happier.</p> <p>35) I feel "in the way" when my dad has a date.</p> <p>41) It is my fault that my dad is not with us anymore.</p> <p>48) I feel I caused the changes in my family.</p> <p>53) If I were better, my mom would be happier.</p>
<u>Social Support Seeking</u>	<p>32) When I am afraid, I have friends that I can rely on.</p> <p>40) I can share my feelings with someone.</p>
<u>Family Satisfaction/ Acceptance</u>	<p>8) I am happy in my family.</p> <p>21) Everything is ok in my family.</p> <p>34) I feel OK living in a single parent family.</p> <p>54) I am worried about more changes in my family.</p>

Item Analysis:

The overall purpose of the item analysis procedure was to assess the item properties. The reliability procedure establishes the degree to which the scale items intercorrelate and thus jointly measure the intended construct. A scale with highly intercorrelated items is considered homogeneous because the items all measure the same construct. Therefore, as Ghiselli et al. (1981) point out, an item should be chosen on the basis of its high positive intercorrelations with the other scale items to maximize the scale reliability.

Scale Reliability:

In determining scale reliability, a Cronbach's coefficient alpha was generated for each subscale. The desired results for this procedure are a high inter-item correlation coefficient and a high alpha value for each subscale. A high inter-item correlation on a subscale signifies that all items are simultaneously measuring the same construct. A high alpha value indicates that there is internal consistency among the items, and that the scale is reliable. The results of this procedure point out which items, if any, should be removed from their respective scales because they lower the scale reliability. For the purpose of this study, a scale alpha level less than 0.70 was considered too low for a reliable set of scale items, a coefficient alpha of

0.70 to 0.80 was considered moderate and needs some improvement, and a coefficient higher than 0.80 indicated good scale internal consistency.

The interpretation of the results from the reliability assessment procedure focuses on the relation of the individual items of the total scale. Each item on the Rainbows scale is judged by whether or not the scale alpha level would be raised if the item were removed. In other words, if the presence of a question on the scale lowers its internal consistency, then that item is not assessing the same thing as the other items on the scale.

A low item-correlation coefficient and a low squared multiple correlation coefficient for an item are also determinants of a poor scale item. The item-total correlation coefficient indexes how well the item relates to the scale total score, and thus the other items. The squared multiple correlation coefficient indicates the amount of variability in the total score explained by the item. Normally, if the alpha if-item-deleted is found to be higher than the scale alpha, then the item has poor internal consistency characteristics.

Factor Analysis:

In addition to the item analysis procedures, a factor analysis was performed using SPSS-PC for windows to generate a principle components analysis on the items. This was done to evaluate how well the items comprising each construct

relate to one another and to produce underlying factors that make up the separate constructs. If the proposed constructs can be subdivided according to theoretical factors, the results will point out which scale items load onto each particular factor, and judgments can be made as to what factors represent. The axes of the items were rotated (varimax) to aid in the loading of factors.

School form of the Coopersmith Self-Esteem Inventory (SEI)

The Self-Esteem Inventory (SEI) was used to obtain a self-report of the child's self-esteem. Self-esteem according to what is described in the manual is defined as "a set of attitudes and beliefs a person brings with him- or herself when facing the world." (Coopersmith, p. 1) The SEI consists of 58 items. Fifty of the items are used to determine the total score and 8 items are used for the lie scale. When scoring the inventory, twenty-six items comprise the general score, and 8 items comprise each of the other subscales which are: social; home/parents; and school/academic. The reliability of the total score ranges from .81 to .92. (Coopersmith, p. 12)

Behavioral Academic Self-Esteem rating scale (BASE)

The Behavioral Academic Self-Esteem (BASE) scale was designed emphasize the traits pertinent to children's self-esteem as revealed in their academic performance. This

instrument is the source of the term "academic self-esteem." The teacher rates the child on each question. The responses range from never coded as a "1" to always coded as a "5". The BASE measures five factors: 1) student initiative is comprised of 6 items (possible score of 30) and measures how often the student participates in the classroom; 2) social attention consists of 3 items (possible score of 15) and measures how well the student fits into the classroom environment; 3) success/ failure consists of 2 items (possible score of 10) and assesses how successfully students cope with failure, criticism, correction, or other responses that could be viewed as negative; 4) social attraction is comprised of 3 items (possible score 15) and measures how compatible the student is with his or her peers; and 5) self-confidence consist of 2 items (possible score of 10) and measures the student's verbal expression about school accomplishments. The Total BASE score is obtained by summing these 5 scores for a possible score of 80. (Coopersmith & Gilberts, p. III-1) The reliability of the Total BASE score is .61 (Coopersmith & Gilberts, p. VII-2).

CHAPTER IV

RESULTS

Description of the Sample

A summary of the sample demographic statistics is presented in table 2. The participants in this sample were 67 children from 4 sites who were participating in the Rainbows for All God's Program for the first time. Sixty-nine percent of the subjects in this sample were females and 31% were males. Grade level of the subjects ranged from kindergarten to eighth grade. Twenty-one percent were in second grade, 13% were in each the fourth and fifth grades, 10% were in the eighth grade, 9% were in kindergarten, 9% were in the first grade, 7.5 % were in the third grade, sixth grade and seventh grade and 1.5% of the data set was missing. The age range of the subjects varied from 5 to 14. Nineteen percent were age 8, 18% were age 10, 13% were age 9, 10% were age 7, 7.5% were ages 6,9 and 13, 4.5% were ages 5 and 14, and 1.5% of the data set was missing.

The racial background of the participants was predominantly White(93%). Only 1.5% were Black, 1.5% were Native American, 1.5% were Asian/Pacific Islander, and another 1.5% categorized themselves into the Other category.

Table 2

Full Sample Demographic Characteristics

Variables	Frequency	Percent
<u>Gender</u>		
Male	21	31.3
Female	46	68.7
<u>Grade Level</u>		
K	6	9.0
1	6	9.0
2	14	20.9
3	5	7.5
4	9	13.4
5	9	13.4
6	5	7.5
7	5	7.5
8	7	10.4
Missing	1	1.5

Table 2 (continued)

Full Sample Demographic Characteristics

Variables	Frequency	Percent
<u>Age</u>		
5	3	4.5
6	5	7.5
7	7	10.4
8	13	19.4
9	5	7.5
10	12	17.9
11	4	6.0
12	9	13.4
13	5	7.5
14	3	4.5
Missing	1	1.5
<u>Race</u>		
Black	1	1.5
White	62	92.5
Native American	1	1.5
Asian, Pacific Islander	1	1.5
Other	1	1.5
Missing	1	1.5

Table 2 (continued)

Full Sample Demographic Characteristics

Variables	Frequency	Percent
<u>Hispanic</u>		
No	61	91.0
Yes	1	1.5
Unsure	1	1.5
Missing	4	6.0
<u>Type of Loss</u>		
Divorce	45	67.2
Separation	9	13.4
Loss of Father	2	3.0
Other	8	11.9
Missing	3	4.5
<u>Length of Time Since Loss (in months)</u>		
1	1	1.5
2	1	1.5
3	5	7.5
4	3	4.5
6	5	7.5
7	1	1.5
8	1	1.5
12	8	11.5

Table 2 (continued)

Full Sample Demographic Characteristics

Variables	Frequency	Percent
<u>Length of Time Since</u> <u>Loss (in months)</u> (continued)		
18	2	3.0
24	3	4.5
30	1	1.5
36	1	1.5
48	6	9.0
60	3	4.5
72	1	1.5
84	4	6.0
96	1	1.5
99	1	1.5
120	1	1.5
132	1	1.5
144	2	3.0
Missing	14	20.9
<u>Father living with child</u>		
Yes	21	31.3
No	45	67.2
Missing	1	1.5

Table 2 (continued)

Full Sample Demographic Characteristics

Variables	Frequency	Percent
<u>Mother living with child</u>		
Yes	57	85.1
No	9	13.4
Missing	1	1.5
<u>Step-Mother living with child</u>		
Yes	6	9.0
No	60	89.6
Missing	1	1.5
<u>Step-Father living with child</u>		
Yes	8	11.9
No	58	86.6
Missing	1	1.5
<u>Foster Parent living with child</u>		
Yes	1	1.5
No	65	97.0
Missing	1	1.5

Table 2 (continued)

Full Sample Demographic Characteristics

Variables	Frequency	Percent
<u>Grand Parent living with child</u>		
Yes	3	4.5
No	63	94.0
Missing	1	1.5
<u>Other Related Adult living with child</u>		
Yes	1	1.5
No	65	97.0
Missing	1	1.5
<u>Other Unrelated Adult living with child</u>		
Yes	2	3.0
No	64	95.5
Missing	1	1.5

Table 2 (continued)

Full Sample Demographic Characteristics

Variables	Frequency	Percent
<u>Number of Male Siblings</u> <u>living with child</u>		
0	30	44.8
1	24	35.8
2	5	7.5
3	3	4.5
4	4	6.0
Missing	1	1.5
<u>Number of Female Siblings</u> <u>living with child</u>		
0	24	35.8
1	24	35.8
2	15	22.4
3	3	4.5
Missing	1	1.5
<u>Number of Older Siblings</u> <u>living with child</u>		
0	32	47.8
1	21	31.3
2	10	14.9
3	3	4.5
Missing	1	1.5

Table 2 (continued)

Full Sample Demographic Characteristics

Variables	Frequency	Percent
<hr/>		
<u>Number of Younger Siblings</u>		
<u>living with child</u>		
0	21	31.3
1	26	38.8
2	12	17.9
3	5	7.5
4	2	3.0
Missing	1	1.5

Again, 1.5% of the data set was missing. Ninety-one percent were not of Hispanic origin while 1.5% were either of Hispanic origin or unsure. One and one-half percent of the data set was missing. The type of loss experienced included: 67% divorce; 13% separation; 12% other; 3% loss of father; and 4.5% of the data set was missing. The length of time since the loss ranged from one month to 12 years. The mean length of time since the loss was 37.6 with a standard deviation of 40 months (3.4 years).

The parent or guardian responded with a check mark for all of those living in the house with the child. Sixty-seven percent responded that their father was not living in the house while 31% of the fathers lived with the child. In the case of the mother, 85% lived with the child while 13% did not. Ninety percent reported that there was no step-mother living with the child while 9% reported that there was a step-mother living with the child. Eighty-seven percent responded that there was no step-father living with the child while 12% stated that there was a step-father in the home. Ninety-seven percent reported that there was no foster parent living with the child while 1.5% reported that there was a foster parent in the home. Ninety-four percent responded that there was no grandparent living with the child while 4.5% stated that there was a grandparent in the home. Ninety-seven percent reported that there was no other related adult living with the child while 1.5% reported that

there was another related adult living in the home. Finally, 95.5% responded that there was no other unrelated adult living with the child while 3% reported that there was an other unrelated adult in the home.

The number of male siblings living with the child ranged from 0 to 4. Forty-five percent reported no male siblings, while 36% reported one male sibling, 7.5% had two male siblings, 4.5% had three male siblings and 6% had four male siblings. Female siblings living with the child ranged from 0 to 3. Thirty-six percent reported each zero and one female sibling, 22% had two female siblings and 4.5% had three female siblings.

The number of older siblings living with the child ranged from 0 to 3. Forty-seven percent stated no older siblings, while 31% stated one, 15% stated two and 4.5% stated three. The number of younger siblings living with the child ranged from 0 to 4. Thirty-nine percent responded there was one younger sibling, while 31% reported that there was no younger sibling, 18% reported that there were two younger siblings and 3% reported that there were four younger siblings.

Descriptive Statistics of the Scales

The means and standard deviations and ranges are presented in Table 3. It should be noted that on the Rainbows measure all items that were missing or where the

Table 3

Summary of Descriptive Statistics for Pretests

Variables	Mean	SD	Range
<u>Rainbows</u> (n=67)			
Total Score	52.35	5.7	34-64
<u>SEI</u> (n=66)			
Short Version Score	14.88	5.9	4-25
General	16.82	5.4	5-26
Social	5.36	2.2	1-8
Home	4.89	2.4	0-8
School	5.37	1.9	1-8
Total Score	64.41	20.0	22-100
Lie Score	2.9	1.9	0-7
<u>BASE</u> (n=67)			
Student Initiative	22.42	3.8	15-30
Social Attention	11.60	3.0	7-16
Success/Failure	7.81	1.6	4-14
Social Attraction	10.63	2.3	5-15
Self-Confidence	7.43	1.7	3-11
Total BASE Score	60.13	9.1	18-76

child selected the category "Does Not Apply", the mean score for each item was inserted. The mean for the total Rainbows measure pretest score in this sample ($n=67$) was 52.35 ($SD = 5.65$). The range of scores was 34 to 64. The Rainbows measure originally consisted of 56 items, but was reduced to 25 items using the results from the item analysis/scale reliability procedure. The mean of these 25 items was used to calculate the total score.

The mean for the total Self-Esteem Inventory (SEI) pretest score in this sample ($n=66$) was 65.4 ($SD = 20.0$) with a range from 22 to 100. Various studies (Trowbride, 1972; Strodtbeck, 1972; and Donaldson 1974) were used to establish normative data. The sample mean was lower than the range of the means was 60.2 to 83.3 (SD from 11.6 to 16.3). The mean pretest scores for the subscales were as follows: short version = 14.88 ($SD = 5.9$); general = 16.82 ($SD = 5.4$); social = 5.36 ($SD = 2.2$); home = 4.89 ($SD = 2.4$); and school = 5.37 ($SD = 1.9$). The lie score ($M=2.9$, $SD = 1.9$) was low which indicates that the respondents were not highly defended. The means and variation of scores for this sample seem comparable to those found in similar populations.

The mean for the Behavioral Academic Self-Esteem total pretest score for this sample ($n=67$) was 60.13 ($SD = 9.1$). This is higher than the reported normative data ($M = 56.43$, $SD = 10.4$). The range was 18-76 which is comparable to

normative data (16-80). The means and standard deviations of the subscales of the pretest are listed with the respective normative data given parenthetically: student initiative = 22.42, SD = 3.8 (M = 20.97, SD = 4.64); social attention = 11.60, SD = 3.0 (M = 11.00, SD = 2.2); success/failure = 7.81, SD = 1.6 (M = 7.21, SD = 1.7); social attraction = 10.63, SD = 2.3 (M = 10.08, SD = 2.3); and self-confidence 7.43, SD 1.7 (M = 7.17, SD = 1.6).

Comparison of Pretest and Posttest

The means, standard deviations and ranges for the posttests are presented in Table 4. In addition, the results of the t-tests are reported. T-tests were used to compare the group means of the pretest and the posttest to assess whether there was a significant difference between the means.

The means of the Rainbows measure were not found to be significantly different (t = -.49, df 66). It should be noted that the sample size for comparison was sixty seven because the mean was inserted for missing data.

The means for the Self-Esteem Inventory (SEI) total score were also not found to be significantly different (t = .06, df 38). The pairwise comparison of all the scores on the SEI yielded a sample size of thirty-nine. The general, social, and school subscale pretest-posttest means were not found to be significantly different (t = .56, df 38;

Table 4

Summary of Descriptive Statistics for Posttests

Variables	Mean	SD	Range	<u>t</u>
<u>Rainbows</u> (n=67)				
Total Score	52.64	5.3	32-65	-.49 (<u>df</u> 66)
<u>SEI</u> (n=39)				
Short Version Score	14.68	6.0	1-25	.09 (<u>df</u> 38)
General	16.28	5.0	3-26	.56 (<u>df</u> 38)
Social	5.55	2.2	1-8	1.12 (<u>df</u> 38)
Home	5.45	2.0	0-8	2.07* (<u>df</u> 38)
School	4.90	1.9	2-8	1.01 (<u>df</u> 38)
Total Score	65.60	18.7	14-100	.06 (<u>df</u> 38)
Lie Score	2.2	1.8	0-6	2.56* (<u>df</u> 38)
<u>BASE</u> (n=31)				
Student Initiative	24.00	3.6	16-30	2.25* (<u>df</u> 30)
Social Attention	12.38	2.5	3-15	1.78 (<u>df</u> 30)
Success/Failure	7.68	1.5	4-10	-.31 (<u>df</u> 30)
Social Attraction	11.16	2.4	6-15	1.14 (<u>df</u> 30)
Self-Confidence	7.97	1.7	4-10	1.48 (<u>df</u> 30)
Total BASE Score	63.39	8.3	46-79	2.68* (<u>df</u> 30)
*p < .05				

$t = 1.12$, $df\ 38$; and $t = 1.01$, $df\ 38$, respectively).

However, there was a significant difference found between the means of the home subscale ($t = 2.07$, $df\ 38$, $p < .05$). In addition, the lie subscale score means were found to be significantly different ($t = 2.56$, $df\ 38$, $p < .05$). This finding indicates that the amount of overall defensiveness was reduced between the pretest and the posttest.

The mean scores between the pretest and the posttest for the total Behavioral Academic Self-Esteem (BASE) rating scale were found to be significantly different ($t = 2.68$, $df\ 30$, $p < .05$). The pairwise t-tests for the BASE yielded a sample size of thirty-one. The subscale of student initiative means were also found to be significantly different ($t = 2.25$, $df\ 30$, $p < .05$). However, the remaining subscale means were not found to be significantly different (social attention, $t = 1.78$, $df\ 30$; success/failure, $t = -.31$, $df\ 30$; social attraction, $t = 1.14$, $df\ 30$; and self confidence, $t = 1.48$, $df\ 30$).

Item Analysis--Scale reliability

A series of scale reliability was performed in an effort to reduce the number of questions on the Rainbows' test. The original item pool (56 items) was reduced to 25 items. Reliability analysis for each subscale of the Rainbows measure was utilized. These subscales include: anger; hurt; sadness/depression; happy; trust; safety/security;

denial; wishful thinking; self-blame/guilt; social support seeking; and family satisfaction/acceptance. Table 1 lists the subscale, item numbers and the individual items associated with each subscale on the test. An examination of the reliability indexes of each of the subscales revealed that the internal consistency was poor. Therefore, item reduction was used to eliminate items with a low alpha (below .80). The resulting items were used as a total score for the Rainbows measure. Given this, unfortunately the concept of subscales for the Rainbows measure was then eliminated and only a total score was used. The results seen in Table 5 shows the alpha "if-item-deleted" for the remaining 25 items. All of items, if deleted, have an alpha of .88 or higher. The standardized item alpha was .8973.

Correlations of the Rainbows Measure

In Table 6, the correlations for the Rainbows measure are presented. It should be noted that items are reported below the diagonal, down the columns, and only once. Item PR3 was found to be moderately correlated with several variables (PR8, $r = .30$, $p < .05$; PR10, $r = .33$, $p < .01$; PR15, $r = .38$, $p < .01$; PR20, $r = .47$, $p < .001$; PR24, $r = .38$, $p < .01$; PR26, $r = .34$, $p < .01$; PR27, $r = .27$, $p < .05$; PR41, $r = .25$, $p < .05$; PR48, $r = .38$, $p < .01$; and PR55, $r = .38$, $p < .01$).

Item PR8 was highly intercorrelated with several

Table 5

Rainbows: Reliability Analysis---Scale (alpha)

Variables	alpha if item deleted
<hr/>	
PR3	.8919
PR4	.8983
PR8	.8878
PR10	.8876
PR13	.8873
PR15	.8886
PR19	.8937
PR20	.8856
PR21	.8940
PR24	.8892
PR26	.8912
PR27	.8878
PR30	.8935
PR33	.8899
PR36	.8925
PR37	.8898
PR41	.8940
PR44	.8917
PR46	.8903
PR47	.8926
PR48	.8905

Table 5 (continued)

Rainbows: Reliability Analysis---Scale (alpha)

Variables	alpha if item deleted
PR52	.8867
PR54	.8882
PR55	.8922
PR56	.8938

25 items Standardized item alpha = .8973

Table 6

Correlation Matrix for Rainbows

	PR3	PR4	PR8	PR10	PR13	PR15	PR19	PR20	PR21	PR24
PR3	1.00									
PR4	.16	1.00								
PR8	.30*	.18	1.00							
PR10	.33**	.06	.19	1.00						
PR13	.23	.23	.46***	.45***	1.00					
PR15	.38***	-.07	.45***	.45***	.46***	1.00				
PR19	.15	.01	.36**	.25*	.08	.19	1.00			
PR20	.47***	.08	.48***	.37**	.56***	.60***	.19	1.00		
PR21	.16	.01	.48***	.14	.26*	.29*	.19	.38**	1.00	
PR24	.38**	.15	.45***	.39**	.40**	.40**	.17	.43***	.36**	1.00
PR26	.34**	.06	.20	.39**	.30*	.48***	.23	.34**	.21	.33**
PR27	.27*	.09	.38**	.57***	.54***	.40**	.14	.47***	.22	.36**
PR30	.13	.15	.26*	.25*	.19	.26*	.15	.28*	.17	.25

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 6 (continued)

Correlation Matrix for Rainbows

	PR3	PR4	PR8	PR10	PR13	PR15	PR19	PR20	PR21	PR24
PR33	.17	.05	.36**	.41**	.25*	.25*	.29*	.35**	.29*	.38**
PR36	.18	.14	.13	.41**	.14	.04	.31*	.30	.11	.06
PR37	.15	.06	.62***	.31*	.45***	.34**	.30*	.46***	.37**	.28*
PR41	.25*	.05	.23	.25*	.31*	.23	.00	.24*	-.01	.16
PR44	.04	.23	.42***	.20	.35**	.41**	.08	.44***	.15	.19
PR46	.23	.06	.24	.45***	.35**	.16	.28*	.21	.09	.38**
PR47	.18	.10	.10	.25*	.31*	.25*	.04	.32**	-.04	.25*
PR48	.38**	.08	.49***	.34**	.21	.41**	.15	.41**	.14	.25*
PR52	.16	.16	.56***	.44***	.43***	.36**	.42***	.35**	.43***	.34**
PR54	.16	.16	.31*	.38**	.42***	.37**	.30*	.50***	.25*	.28*
PR55	.38**	-.04	.32**	.33**	.42***	.25*	.18	.38**	.01	.18
PR56	.07	.03	.01	.30*	.25*	.16	.14	.30*	.02	.18

* $p < .05$, ** $p < .01$, *** $p < .001$

Table 6 (continued)

Correlation Matrix for Rainbows

	PR26	PR27	PR30	PR33	PR36	PR37	PR41	PR44	PR46	PR47
PR26	1.00									
PR27	.30*	1.00								
PR30	.13	.12	1.00							
PR33	.39**	.25*	.10	1.00						
PR36	.23	.35**	.16	.36**	1.00					
PR37	.31*	.37**	.46***	.36**	.20	1.00				
PR41	.01	.49***	.11	-.07	.11	.16	1.00			
PR44	.21	.23	.16	.46***	.13	.34**	-.24	1.00		
PR46	.36**	.40**	.19	.54***	.31*	.12	.21	.19	1.00	
PR47	.23	.16	.39**	.42***	.21	.02	.21	.31*	.38**	1.00
PR48	.12	.61***	.32**	.03	.26*	.31*	.38**	.16	.15	.06
PR52	.41**	.33**	.28*	.47***	.27*	.60***	.06	.34**	.25*	.29*
PR54	.13	.15	.26*	.25*	.19	.26*	.15	.28*	.17	.25*

*p < .05, **p < .01, ***p < .001

Table 6 (continued)

Correlation Matrix for Rainbows

	PR26	PR27	PR30	PR33	PR36	PR37	PR41	PR44	PR46	PR47
PR55	.11	.37**	.24	.11	.15	.15	.47***	.03	.21	.25*
PR56	.21	.19	.23	.27*	.31*	.12	-.01	.15	.28*	.43***

	PR48	PR52	PR54	PR55	PR56
PR48	1.00				
PR52	.29*	1.00			
PR54	.34**	.39**	1.00		
PR55	.41**	.12	.29*	1.00	
PR56	.15	.18	.38**	.17	1.00

* $p < .05$, ** $p < .01$, *** $p < .001$

variables (PR13, $r = .46$, $p < .001$; PR15, $r = .45$, $p < .001$; PR19, $r = .36$, $p < .01$; PR20, $r = .48$, $p < .001$; PR21, $r = .48$, $p < .001$; PR24, $r = .45$, $p < .001$; PR27, $r = .38$, $p < .01$; PR30, $r = .26$, $p < .05$; PR33, $r = .36$, $p < .01$, PR37, $r = .62$, $p < .001$; PR44, $r = .42$, $p < .001$; PR48, $r = .49$, $p < .001$; PR52, $r = .56$, $p < .001$; PR54, $r = .31$, $p < .05$; and PR55, $r = .32$, $p < .01$).

Item PR10 was highly intercorrelated with several items (PR13, $r = .45$, $p < .001$; PR15, $r = .45$, $p < .001$; PR19, $r = .25$, $p < .05$; PR20, $r = .37$, $p < .01$; PR24, $r = .39$, $p < .01$; PR26, $r = .39$, $p < .01$; PR27, $r = .57$, $p < .001$; PR30, $r = .25$, $p < .05$; PR33, $r = .41$, $p < .01$; PR36, $r = .41$, $p < .01$; PR37, $r = .31$, $p < .05$; PR41, $r = .25$, $p < .05$; PR46, $r = .45$, $p < .001$; PR47, $r = .25$, $p < .05$; PR48, $r = .34$, $p < .01$; PR52, $r = .44$, $p < .001$; PR54, $r = .38$, $p < .01$; PR55, $r = .33$, $p < .01$; and PR56, $r = .30$, $p < .05$).

Item PR13 was also intercorrelated with several variables (PR15, $r = .46$, $p < .001$; PR20, $r = .56$, $p < .001$; PR21, $r = .26$, $p < .05$; PR24, $r = .40$, $p < .01$; PR27, $r = .54$, $p < .001$; PR33, $r = .25$, $p < .05$; PR37, $r = .45$, $p < .001$; PR41, $r = .31$, $p < .05$; PR44, $r = .35$, $p < .01$; PR46, $r = .35$, $p < .01$; PR47, $r = .31$, $p < .05$; PR52, $r = .43$, $p < .001$; PR54, $r = .42$, $p < .001$; PR55, $r = .42$, $p < .001$; and PR56, $r = .25$, $p < .05$).

Item PR15 was intercorrelated with many items (PR20, $r = .60$, $p < .001$; PR21, $r = .29$, $p < .05$; PR24, $r = .40$, $p < .01$; PR27, $r = .54$, $p < .001$; PR33, $r = .25$, $p < .05$; PR37, $r = .45$, $p < .001$; PR41, $r = .31$, $p < .05$; PR44, $r = .35$, $p < .01$; PR46, $r = .35$, $p < .01$; PR47, $r = .31$, $p < .05$; PR52, $r = .43$, $p < .001$; PR54, $r = .42$, $p < .001$; PR55, $r = .42$, $p < .001$; and PR56, $r = .25$, $p < .05$).

.01; PR26, $\underline{r} = .48$, $\underline{p} < .001$; PR27, $\underline{r} = .40$, $\underline{p} < .01$; PR30, $\underline{r} = .26$, $\underline{p} < .05$; PR33, $\underline{r} = .25$, $\underline{p} < .05$; PR37, $\underline{r} = .34$, $\underline{p} < .01$; PR44, $\underline{r} = .41$, $\underline{p} < .01$; PR47, $\underline{r} = .25$, $\underline{p} < .05$; PR48, $\underline{r} = .41$, $\underline{p} < .01$; PR52, $\underline{r} = .36$, $\underline{p} < .01$; PR54, $\underline{r} = .37$, $\underline{p} < .01$; and PR55, $\underline{r} = .25$, $\underline{p} < .05$).

Item PR19 was intercorrelated with several items (PR33, $\underline{r} = .29$, $\underline{p} < .05$; PR36, $\underline{r} = .31$, $\underline{p} < .05$; PR37, $\underline{r} = .30$, $\underline{p} < .05$; PR46, $\underline{r} = .28$, $\underline{p} < .05$; PR52, $\underline{r} = .42$, $\underline{p} < .001$; and PR54, $\underline{r} = .30$, $\underline{p} < .05$).

Item PR20 was highly intercorrelated with several items (PR21, $\underline{r} = .38$, $\underline{p} < .01$; PR24, $\underline{r} = .43$, $\underline{p} < .001$; PR26, $\underline{r} = .34$, $\underline{p} < .01$; PR27, $\underline{r} = .47$, $\underline{p} < .001$; PR33, $\underline{r} = .35$, $\underline{p} < .01$; PR37, $\underline{r} = .46$, $\underline{p} < .001$; PR41, $\underline{r} = .24$, $\underline{p} < .05$; PR44, $\underline{r} = .44$, $\underline{p} < .001$; PR47, $\underline{r} = .32$, $\underline{p} < .01$; PR48, $\underline{r} = .41$, $\underline{p} < .01$; PR52, $\underline{r} = .35$, $\underline{p} < .01$; PR54, $\underline{r} = .50$, $\underline{p} < .001$; PR55, $\underline{r} = .38$, $\underline{p} < .01$; and PR56, $\underline{r} = .30$, $\underline{p} < .05$).

Item PR21 was intercorrelated with several items (PR24, $\underline{r} = .36$, $\underline{p} < .01$; PR33, $\underline{r} = .29$, $\underline{p} < .05$; PR37, $\underline{r} = .37$, $\underline{p} < .01$; PR52, $\underline{r} = .43$, $\underline{p} < .001$; and PR54, $\underline{r} = .25$, $\underline{p} < .05$).

Item PR24 was intercorrelated with several items (PR26, $\underline{r} = .33$, $\underline{p} < .01$; PR27, $\underline{r} = .36$, $\underline{p} < .01$; PR33, $\underline{r} = .38$, $\underline{p} < .01$; PR37, $\underline{r} = .28$, $\underline{p} < .05$; PR46, $\underline{r} = .38$, $\underline{p} < .01$; PR47, $\underline{r} = .25$, $\underline{p} < .05$; PR48, $\underline{r} = .25$, $\underline{p} < .05$; PR52, $\underline{r} = .34$, $\underline{p} < .01$; and PR54, $\underline{r} = .28$, $\underline{p} < .05$).

Item PR26 was intercorrelated with several items (PR27, $\underline{r} = .30$, $\underline{p} < .05$; PR33, $\underline{r} = .39$, $\underline{p} < .01$; PR37, $\underline{r} = .31$, $\underline{p} < .01$).

.05; PR46, $\underline{r} = .36$, $\underline{p} < .01$; and PR52, $\underline{r} = .41$, $\underline{p} < .01$).

Item PR27 was intercorrelated with several variables (PR33, $\underline{r} = .25$, $\underline{p} < .05$; PR36, $\underline{r} = .35$, $\underline{p} < .01$; PR37, $\underline{r} = .37$, $\underline{p} < .01$; PR41, $\underline{r} = .49$, $\underline{p} < .001$; PR46, $\underline{r} = .40$, $\underline{p} < .01$; PR48, $\underline{r} = .61$, $\underline{p} < .001$; PR52, $\underline{r} = .33$, $\underline{p} < .01$; and PR55, $\underline{r} = .37$, $\underline{p} < .01$).

Item PR30 was moderately intercorrelated with several items (PR37, $\underline{r} = .46$, $\underline{p} < .001$; PR47, $\underline{r} = .39$, $\underline{p} < .01$; PR48, $\underline{r} = .32$, $\underline{p} < .01$; PR52, $\underline{r} = .28$, $\underline{p} < .05$; and PR54, $\underline{r} = .26$, $\underline{p} < .05$).

Item PR33 was highly intercorrelated with several variables (PR36, $\underline{r} = .36$, $\underline{p} < .01$; PR37, $\underline{r} = .36$, $\underline{p} < .01$; PR44, $\underline{r} = .46$, $\underline{p} < .001$; PR46, $\underline{r} = .54$, $\underline{p} < .001$; PR47, $\underline{r} = .42$, $\underline{p} < .001$; PR52, $\underline{r} = .47$, $\underline{p} < .001$; PR54, $\underline{r} = .25$, $\underline{p} < .05$; and PR56, $\underline{r} = .27$, $\underline{p} < .05$).

Item PR36 was intercorrelated with several items (PR46, $\underline{r} = .31$, $\underline{p} < .05$; PR48, $\underline{r} = .26$, $\underline{p} < .05$; and PR52, $\underline{r} = .27$, $\underline{p} < .05$). Item PR37 was intercorrelated with several items (PR44, $\underline{r} = .34$, $\underline{p} < .01$; PR48, $\underline{r} = .31$, $\underline{p} < .05$; PR52, $\underline{r} = .60$, $\underline{p} < .001$; and PR54, $\underline{r} = .26$, $\underline{p} < .05$).

Item PR41 was intercorrelated with several items (PR48, $\underline{r} = .38$, $\underline{p} < .01$; and PR55, $\underline{r} = .47$, $\underline{p} < .001$). Item PR44 was intercorrelated with several items (PR47, $\underline{r} = .31$, $\underline{p} < .05$; PR52, $\underline{r} = .34$, $\underline{p} < .01$; and PR54, $\underline{r} = .28$, $\underline{p} < .05$). Item PR46 was intercorrelated with items (PR47, $\underline{r} = .38$, $\underline{p} < .01$; PR52, $\underline{r} = .25$, $\underline{p} < .05$; and PR56, $\underline{r} = .28$, $\underline{p} < .05$).

Item PR47 was intercorrelated with several items (PR52, $r = .29$, $p < .05$; PR54, $r = .25$, $p < .05$; PR55, $r = .25$, $p < .05$; and PR56, $r = .43$, $p < .001$).

Item PR48 was intercorrelated with several items (PR52, $r = .29$, $p < .05$; PR54, $r = .34$, $p < .01$; and PR55, $r = .41$, $p < .01$). Item PR52 was moderately intercorrelated with item PR54, $r = .39$, $p < .01$. Item PR54 was intercorrelated with items PR55 ($r = .29$, $p < .05$) and PR56 ($r = .38$, $p < .01$).

Factor Analysis

An exploratory factor analysis procedure was utilized on the Rainbows measure to determine which items loaded on a given factor or construct. Twenty-five items of the Rainbows measure were used. In addition, the mean score was inserted for data that was missing. Most of the factors emerging from the factor analysis were found to be complex. The factor matrix and the final statistics for the Rainbows measure are presented in Table 7.

Before discussing the results of the factor analysis, it should be noted that the sample size was very small. It is recognized that the sample size for this type of analysis should be five or six times larger. These results should be viewed with considerable caution. An eigenvalue of 1.00 or greater was used as the minimum inclusion criteria. It can be seen by looking at the final statistics, that there were

Table 7

Factor Matrix for Rainbows

Variables	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
PR3_1	.18656	.09349	-.52449	.00828	.29681
PR4_1	.09128	.04251	.23390	.47951	.46832
PR8_1	-.11140	.74894	.15605	-.04124	-.24756
PR10_1	.47807	-.26176	-.11993	-.35986	-.26076
PR13_1	.65297	.14494	-.17291	-.22656	-.13620
PR15_1	.43814	.10864	-.40416	.15146	.26361
PR19_1	.44598	.02802	.28994	-.26480	.45425
PR20_1	.58952	.26535	-.27885	-.27811	.13460
PR21_1	-.23630	.58717	-.02806	.02850	.40698
PR24_1	.36785	.11077	-.33000	.31969	-.01763
PR26_1	-.07771	.49831	-.05464	-.21935	-.35385
PR27_1	.64407	-.12252	.44939	-.30057	-.01858
PR30_1	.33573	.13120	-.09171	.42876	-.03360
PR33_1	.40531	-.28686	-.24554	-.21020	.13048
PR36_1	.22839	-.02390	.45530	.36600	.11328
PR37_1	-.32644	.50641	.23816	-.20848	.09500
PR41_1	.44622	.10023	.54089	.02886	.05298
PR44_1	.50421	.26769	-.34847	.01663	.01053
PR46_1	.61639	-.18231	.17938	-.29451	.31751
PR47_1	.50179	.34172	.04314	.53801	-.14140
PR48_1	.45305	-.21477	.09378	.17397	.00969
PR52_1	.07640	.74819	.01834	-.16097	.17915
PR54_1	.40139	.28715	.03702	-.12251	-.28297
PR55_1	.54997	.09988	.35875	.09569	-.32725
PR56_1	.42684	-.07996	-.12302	.37809	-.32119

Table 7 (continued)

Factor Matrix for Rainbows

Variables	Factor 6	Factor 7	Factor 8	Factor 9
PR3_1	.21868	.20989	.21681	-.21067
PR4_1	-.07736	.06098	.17591	.39187
PR8_1	.16641	-.04361	.30294	-.12822
PR10_1	-.01990	.30954	-.09251	.30641
PR13_1	-.24662	-.01916	-.00042	-.21302
PR15_1	-.29904	.29599	.14458	.05291
PR19_1	.37697	.16917	.03178	-.15832
PR20_1	-.00057	-.08134	-.29289	.13420
PR21_1	-.13797	.03472	.11690	-.01187
PR24_1	-.47482	.14611	-.12252	.12429
PR26_1	.14551	.50022	-.13745	.24080
PR27_1	-.08028	.11534	.00978	.08392
PR30_1	.45179	.20791	-.25879	-.35184
PR33_1	.45875	-.26692	.21592	.31161
PR36_1	.25039	-.03986	-.22558	.32997
PR37_1	-.14555	.02090	.33679	.27473
PR41_1	-.23779	.03122	-.27281	-.09491
PR44_1	-.08220	-.57976	.01794	.10270
PR46_1	-.14341	-.11283	.01320	-.13355
PR47_1	.08347	-.25583	-.11301	-.06196
PR48_1	.10764	.32738	.41952	-.15850
PR52_1	.11619	.09610	-.26877	.03052
PR54_1	.27173	-.25458	.17892	.09091
PR55_1	-.26450	-.03751	.33389	-.20377
PR56_1	.12690	.17476	.16333	.28462

Table 7 (continued)

Final Statistics of Factor Analysis for Rainbows

Variable	Communality		Factor	Eigenvalue	Pct of Var	Cum Pct
PR3_1	.59006	*	1	4.43852	17.8	17.8
PR4_1	.70831	*	2	2.65733	10.6	28.4
PR8_1	.79846	*	3	1.97331	7.9	36.3
PR10_1	.70761	*	4	1.83044	7.3	43.6
PR13_1	.65372	*	5	1.52695	6.1	49.7
PR15_1	.66028	*	6	1.42061	5.7	55.4
PR19_1	.75701	*	7	1.29972	5.2	60.6
PR20_1	.70158	*	8	1.11764	4.5	65.1
PR21_1	.60189	*	9	1.08346	4.3	69.4
PR24_1	.63625	*				
PR26_1	.77892	*				
PR27_1	.74936	*				
PR30_1	.76140	*				
PR33_1	.79348	*				
PR36_1	.63086	*				
PR37_1	.68274	*				
PR41_1	.64631	*				
PR44_1	.80145	*				
PR46_1	.68421	*				
PR47_1	.76890	*				
PR48_1	.61041	*				
PR52_1	.71988	*				
PR54_1	.51895	*				
PR55_1	.78177	*				
PR56_1	.60416	*				

nine factors (out of 25 items) with an eigenvalue 1.00 or greater. Most of the factors are uninterpretable because there is no clear construct and/or the factor loadings were too low. A factor loading of .5 or higher was used to determine which items contributed to each construct.

Seven variables loaded on the first factor which is identified as Negative Affect. The variables and factor loading for each are: PR13 (I feel down), .65297; PR27 (I think my parent left because of something I did), .64407; PR46 (I feel like there is no place for me to go), .61639; PR20 (I am sad), .58952; PR55 (I feel angry because I live in a single parent family), .54997; PR44 (I feel like crying), .50421; and PR47 (I am afraid that something will happen to my dad), .50179. The first factor had an eigenvalue of 4.44. This accounted for 17.8% of the total variance.

Four variables comprise the second factor which was labeled Family Satisfaction. The variables and the factor loading for each are: PR8 (I am happy in my family), .74894; PR52 (My home life is working out ok), .74819; PR21 (Everything is ok in my family), .58717; and PR37 (I'm having fun with my family), .50641. The eigenvalue of the second factor was 2.66. This accounted for 10.6% of the total variance.

The seven remaining factors were found to be either complex and/or didn't have sufficient factor loadings. That

is to say that the remaining factors were not interpretable.

CHAPTER V

DISCUSSION

Overall, the findings of this study showed that there was no statistically significant difference in the self-esteem measure across the pre and post test condition. That is to say that the Coopersmith Self-Esteem Inventory (SEI) scores were not found to be statistically significant across the pre and post test conditions. The total score was at the low end of the range of reported norms. Therefore, children of divorce may have a low self-esteem. It should be noted that the mean difference between pretest and posttest for the home subscale was found to be significantly higher. Perceptions of home life may have improved from the enrollment time to the completion of the 12 session Rainbows program. The lie pretest and posttest means were also found to be significantly different. The mean of the posttest was significantly lower than that of the pretest. Therefore, the children appeared to be less defensive with respect to answering the questions on the posttest. The mean pre and post test differences of the remaining subscales of the SEI (general, social, and school) were not found to be

significantly different. Even though there was no statistical difference between the pretest and the posttest scores for the total score and on three of the subscales, the element of time should be considered. The posttest was administered 12 sessions after the beginning of the program. The program could be a 12 week program or 5-6 month program lasting two semesters. The question arises: can something that is established such as self-esteem change significantly over a 6 month period or within 12 sessions of a program? It may be better to evaluate the children after longer participation in the program. In addition, the sample size ($n=39$) was much smaller than desired for pre and posttest comparisons.

There was a statistically significant difference found between the pretest and posttest total scores for the Coopersmith & Gilberts' Behavioral Academic Self-Esteem (BASE) rating scale. The BASE was an assessment of the child by the facilitator (teacher or counselor) of the Rainbows program. Of course, there is some concern related to the possible subjectivity of the rater. However, this may also indicate that it is easier for the rater to see change in behavior and self-esteem that is not measured or ascertained by self-report. There are questions related to the possibility of self-esteem changing significantly over a short period of time and the small sample size ($n=31$). The student initiative score was also found to be statistically

significant between the pretest and the posttest. This would indicate more participation within the group prior to enrollment and then after the 12 sessions. The other mean pre and post test scores on the BASE (social attention, success/failure, social attraction, and self-confidence) were not statistically significant between pretest and posttest.

For the Rainbows measure, there was also no statistically significant difference found between the pretest and the posttest means. The reliability analysis eliminated 31 of the items and the theoretical subscales were dropped. An exploratory factor analysis revealed a very complex analysis. While there were nine factors using 25 items, only two of the factors were interpretable (i.e., Negative Affectivity and Family Satisfaction). It is assumed that with a larger sample size, the factor analysis would be more accurate and the findings could be less complex and more easily interpreted.

All of the results should be interpreted with the consideration that this was a convenience sample that was small ($n=67$). The sample was 93% white so the representativeness of the sample is limited. In addition, the age range of the sample is large (5-13). Developmentally, there are different tasks to be accomplished at each age group. In addition, there are differences with respect to the emotional maturity of the respondent and the

care given to responding to the questionnaires. For instance, a thirteen year old would probably respond very differently than a five year old. Facilitators may have introduced a bias in having to read the questionnaires to younger children, and younger children may have difficulty in comprehension of such questions. In sum, it is recommended that the results be interpreted with these limitations in mind. Another limitations of the current study is that there is no comparison group. There is no baseline to see how children from divorced and nondivorced families differ on the Rainbows measure. I could have used a matched study design but this would have limited the sample size. There is normative data for the SEI and BASE for children of nondivorced families. However, there is no normative data available for the Rainbows measure.

Finally, there may be some credence to the Rainbows Program in that it is in an intervention and support group. It has been proven in other research that these types of groups can influence psychological, and emotional well-being in a very positive manner.

Conclusion/Future Research

While the Rainbows program may be very effective, the results of this study offer little evidence to suggest it. This study would best be used as a pilot for further study. There are many things to take into account. For example, the current sample size was too small and did not allow for

a fine-grained analysis of the data set. Attention was not given to: age differences, gender differences, relationships (where possible) which parent has left the home, sibling effects, or those living with the child in the household structure. In addition, time since the loss was not systematically analyzed (i.e., the difference between one month loss or twelve year loss) nor was the type of loss studied in detail (i.e., separation, divorce or death). Previous research indicates that the time of crisis is at the separation when there are more arguments, and the living arrangements may change. If the sample size were larger, time and type of loss could be controlled variables.

Other things to include in further research would be a question regarding religion (which was inadvertently omitted from this study) and economic background or status. In sum, having a larger more representative sample would greatly increase the power of the study and would allow for additional analyses and comparisons. Finally, it will be important to study this program from a qualitative, as well as, quantitative perspective. Many of the characteristics being studied may best be addressed from interviews and first hand witness of the program in action in combination with quantitative measures.

APPENDIX A
BIOGRAPHICAL DATA SHEET

RAINBOWS FOR ALL GOD'S CHILDREN, INC.
PHASE II RESEARCH PROJECT

BIOGRAPHICAL DATA SHEET

1. Student ID code: _____
2. Age: _____
3. Gender: 1) Male 2) Female
4. Grade: _____
5. Hispanic: 1) No 2) Yes 3) Unsure
6. Race:
 - 1) Black
 - 2) White
 - 3) Native American
 - 4) Asian, Pacific Islander
 - 5) Other, specify: _____
7. Type of loss:
 - 1) divorce
 - 2) separation
 - 3) loss of father
 - 4) loss of mother
 - 5) other, specify: _____
8. The approximate length of time since the loss occurred? _____
9. With whom does the student live? (check all that apply)

___ father	___ foster parent(s)
___ mother	___ grandparent(s)
___ step-mother	___ other related adult
___ step-father	___ other unrelated adult
10. Number of siblings: Males _____ Females _____
11. Number of older siblings: _____
12. Number of younger siblings: _____
13. Do all siblings live in the same house? 1) No 2) Yes 3) Unsure
15. Father's occupation _____
16. Mother's occupation _____
17. Step-parent's occupation _____

APPENDIX B

BEHAVIORAL ACADEMIC SELF-ESTEEM (BASE) RATING SCALE

BASE

Behavioral Academic Self-Esteem

Student Profile

	BASE Factor Totals	BASE Classifications		
		High	Mod.	Low
Student Initiative
Social Attention
Success/Failure
Social Attraction
Self-Confidence
Total BASE Score
Percentile

Notes and Comments

Behavioral Academic Self-Esteem

A Rating Scale

Stanley Coopersmith

Ragnar Gilberts

DIRECTIONS: This scale is designed to provide an estimate of the academic self-esteem of your student. Your judgments of the frequencies of several important behaviors will form the basis of the student's score. Please base these judgments on the specific behaviors you have observed in your classroom.

Each item deals with a separate behavior. Items may appear similar, but each represents a different behavior and should be rated without regard or reference to other items.

Please circle the rating number (i.e., 1 through 5) that you believe is the best estimate of that behavior frequency noted in your classroom. It is best not to debate or linger over an item. Most ratings can be completed in less than four minutes.

Student Name Age Sex

Grade Program

School

Rater Name Date



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	Never 1	Seldom 2	Sometimes 3	Usually 4	Always 5
I. Student Initiative					
1. This child is willing to undertake new tasks.	1	2	3	4	5
2. This child is able to make decisions regarding things that affect him or her, e.g., establishing goals, making choices regarding "likes" and "dislikes" or academic interests.	1	2	3	4	5
3. This child shows self-direction and independence in activities.	1	2	3	4	5
4. This child initiates new ideas relative to classroom activities and projects.	1	2	3	4	5
5. This child asks questions when she or he does not understand.	1	2	3	4	5
6. This child adapts easily to changes in procedures.	1	2	3	4	5

Student Initiative Total _____

II. Social Attention

7. This child is quiet in class, speaks in turn, and talks appropriately.	1	2	3	4	5
8. This child talks appropriately about his or her school accomplishments.	1	2	3	4	5
9. This child cooperates with other children.	1	2	3	4	5

Social Attention Total _____

	Never 1	Seldom 2	Sometimes 3	Usually 4	Always 5
III. Success/Failure					
10. This child deals with mistakes or failures easily and comfortably.	1	2	3	4	5
11. This child takes criticism or corrections in stride without overreacting.	1	2	3	4	5

Success/Failure Total _____

IV. Social Attraction

12. This child's company is sought by peers.	1	2	3	4	5
13. This child acts as a leader in group situations with peers.	1	2	3	4	5
14. This child refers to himself or herself in generally positive terms.	1	2	3	4	5

Social Attraction Total _____

V. Self-Confidence

15. This child readily expresses opinions.	1	2	3	4	5
16. This child appreciates his or her work, work products, and activities.	1	2	3	4	5

Self-Confidence Total _____

Total BASE Score _____

Transfer scores to profile on next page.

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APPENDIX C
SELF-ESTEEM INVENTORY (SEI)

Coopersmith Inventory

Stanley Coopersmith, Ph.D.
University of California at Davis

Please Print

Name _____ Age _____

School _____ Sex: M ___ F ___

Grade _____ Date _____

Directions

On the next pages, you will find a list of statements about feelings. If a statement describes how you usually feel, put an X in the column "Like Me." If the statement does not describe how you usually feel, put an X in the column "Unlike Me." There are no right or wrong answers.



Like Me	Unlike Me	
<input type="checkbox"/>	<input type="checkbox"/>	1. Things usually don't bother me.
<input type="checkbox"/>	<input type="checkbox"/>	2. I find it very hard to talk in front of the class.
<input type="checkbox"/>	<input type="checkbox"/>	3. There are lots of things about myself I'd change if I could.
<input type="checkbox"/>	<input type="checkbox"/>	4. I can make up my mind without too much trouble.
<input type="checkbox"/>	<input type="checkbox"/>	5. I'm a lot of fun to be with.
<input type="checkbox"/>	<input type="checkbox"/>	6. I get upset easily at home.
<input type="checkbox"/>	<input type="checkbox"/>	7. It takes me a long time to get used to anything new.
<input type="checkbox"/>	<input type="checkbox"/>	8. I'm popular with kids my own age.
<input type="checkbox"/>	<input type="checkbox"/>	9. My parents usually consider my feelings.
<input type="checkbox"/>	<input type="checkbox"/>	10. I give in very easily.
<input type="checkbox"/>	<input type="checkbox"/>	11. My parents expect too much of me.
<input type="checkbox"/>	<input type="checkbox"/>	12. It's pretty tough to be me.
<input type="checkbox"/>	<input type="checkbox"/>	13. Things are all mixed up in my life.
<input type="checkbox"/>	<input type="checkbox"/>	14. Kids usually follow my ideas.
<input type="checkbox"/>	<input type="checkbox"/>	15. I have a low opinion of myself.
<input type="checkbox"/>	<input type="checkbox"/>	16. There are many times when I'd like to leave home.
<input type="checkbox"/>	<input type="checkbox"/>	17. I often feel upset in school.
<input type="checkbox"/>	<input type="checkbox"/>	18. I'm not as nice looking as most people.
<input type="checkbox"/>	<input type="checkbox"/>	19. If I have something to say, I usually say it.
<input type="checkbox"/>	<input type="checkbox"/>	20. My parents understand me.
<input type="checkbox"/>	<input type="checkbox"/>	21. Most people are better liked than I am.
<input type="checkbox"/>	<input type="checkbox"/>	22. I usually feel as if my parents are pushing me.
<input type="checkbox"/>	<input type="checkbox"/>	23. I often get discouraged at school.
<input type="checkbox"/>	<input type="checkbox"/>	24. I often wish I were someone else.
<input type="checkbox"/>	<input type="checkbox"/>	25. I can't be depended on.
<input type="checkbox"/>	<input type="checkbox"/>	26. I never worry about anything.
<input type="checkbox"/>	<input type="checkbox"/>	27. I'm pretty sure of myself.
<input type="checkbox"/>	<input type="checkbox"/>	28. I'm easy to like.
<input type="checkbox"/>	<input type="checkbox"/>	29. My parents and I have a lot of fun together.

Short
☐

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Like Me	Unlike Me	
<input type="checkbox"/>	<input type="checkbox"/>	30. I spend a lot of time daydreaming.
<input type="checkbox"/>	<input type="checkbox"/>	31. I wish I were younger.
<input type="checkbox"/>	<input type="checkbox"/>	32. I always do the right thing.
<input type="checkbox"/>	<input type="checkbox"/>	33. I'm proud of my school work.
<input type="checkbox"/>	<input type="checkbox"/>	34. Someone always has to tell me what to do.
<input type="checkbox"/>	<input type="checkbox"/>	35. I'm often sorry for the things I do.
<input type="checkbox"/>	<input type="checkbox"/>	36. I'm never happy.
<input type="checkbox"/>	<input type="checkbox"/>	37. I'm doing the best work that I can.
<input type="checkbox"/>	<input type="checkbox"/>	38. I can usually take care of myself.
<input type="checkbox"/>	<input type="checkbox"/>	39. I'm pretty happy.
<input type="checkbox"/>	<input type="checkbox"/>	40. I would rather play with children younger than I am.
<input type="checkbox"/>	<input type="checkbox"/>	41. I like everyone I know.
<input type="checkbox"/>	<input type="checkbox"/>	42. I like to be called on in class.
<input type="checkbox"/>	<input type="checkbox"/>	43. I understand myself.
<input type="checkbox"/>	<input type="checkbox"/>	44. No one pays much attention to me at home.
<input type="checkbox"/>	<input type="checkbox"/>	45. I never get scolded.
<input type="checkbox"/>	<input type="checkbox"/>	46. I'm not doing as well in school as I'd like to.
<input type="checkbox"/>	<input type="checkbox"/>	47. I can make up my mind and stick to it.
<input type="checkbox"/>	<input type="checkbox"/>	48. I really don't like being a ^{boy} girl.
<input type="checkbox"/>	<input type="checkbox"/>	49. I don't like to be with other people.
<input type="checkbox"/>	<input type="checkbox"/>	50. I'm never shy.
<input type="checkbox"/>	<input type="checkbox"/>	51. I often feel ashamed of myself.
<input type="checkbox"/>	<input type="checkbox"/>	52. Kids pick on me very often.
<input type="checkbox"/>	<input type="checkbox"/>	53. I always tell the truth.
<input type="checkbox"/>	<input type="checkbox"/>	54. My teachers make me feel I'm not good enough.
<input type="checkbox"/>	<input type="checkbox"/>	55. I don't care what happens to me.
<input type="checkbox"/>	<input type="checkbox"/>	56. I'm a failure.
<input type="checkbox"/>	<input type="checkbox"/>	57. I get upset easily when I'm scolded.
<input type="checkbox"/>	<input type="checkbox"/>	58. I always know what to say to people.

Gen <input type="checkbox"/>	Soc <input type="checkbox"/>	H <input type="checkbox"/>	Sch <input type="checkbox"/>	Total <input type="checkbox"/>	L <input type="checkbox"/>
				x2	

APPENDIX D
RAINBOWS MEASURE

Phase II - Test Instrument

September, 1992

PLEASE READ THE FOLLOWING STATEMENTS
ANSWER THEM BY CHECKING:
YES, NO, SOMETIMES, DOES NOT APPLY

	YES	NO	SOME- TIMES	DOES NOT APPLY
1. I feel happy.				
2. I have someone older that I can count on.				
3. I am angry.				
4. It hurts me when I leave my mom.				
5. I don't care about the changes in my family.				
6. I know who will take care of me everyday.				
7. I wish my mom and dad were still together.				
8. I am happy in my family.				
9. I am afraid the parent I live with will leave me too.				
10. I feel like giving up.				
11. I trust my dad.				
12. I feel scared when I am alone.				
13. I feel down.				
14. I have confidence in myself for making choices.				
15. I am afraid.				

	YES	NO	SOME-TIMES	DOES NOT APPLY
16. It is my fault that my mom is not with us anymore.				
17. It hurts me when someone in my family cries.				
18. I don't think it is any different to live with only one parent.				
19. I am mad at my dad.				
20. I am sad.				
21. Everything is OK in my family.				
22. I feel "in the way" when my mom has a date.				
23. I enjoy playing with my friends.				
24. I feel like things will never get better.				
25. I am angry because I have extra chores.				
26. I feel safe.				
27. I think my parent left because of something I did.				
28. If I were better, my dad would be happier.				
29. I like to talk about the changes in my family.				
30. I am afraid that something will happen to my mom.				
31. I can't depend on anything anymore.				
32. When I am afraid, I have friends that I can rely on.				

	YES	NO	SOME-TIMES	DOES NOT APPLY
33. I am mad at my mom.				
34. I feel OK living in a single parent family.				
35. I feel "in the way" when my dad has a date.				
36. I feel hurt because my mom doesn't have time for me.				
37. I'm having fun with my family.				
38. I trust my mom.				
39. It hurts me when I leave my dad.				
40. I can share my feelings with someone.				
41. It is my fault that my dad is not with us anymore.				
42. I feel the change in my family is only temporary.				
43. I think my mom and dad will get together again.				
44. I feel like crying.				
45. I don't trust anyone.				
46. I feel like there is no place for me to go.				
47. I am afraid that something will happen to my dad.				
48. I feel I caused the changes in my family.				
49. I think about my family problems.				

	YES	NO	SOME-TIMES	DOES NOT APPLY
50. I know what to do when my parent is late and I am alone.				
51. I feel hurt because my dad doesn't have time for me.				
52. My home life is working out OK.				
53. If I were better, my mom would be happier.				
54. I am worried about more changes in my family.				
55. I am angry because I live in a single-parent family.				
56. I am afraid that we will not have enough money.				

Is there anything we haven't asked you that you would like to tell us about?

REFERENCES

- Allers, Robert D. (1982). Divorce, Children and the School. Princeton: Princeton Book Publishers.
- Amato, Paul R., & Keith, Bruce. (1991). Parental Divorce and the Well-Being of Children: A Meta-Analysis. Psychological Bulletin, 110(1), 26-46.
- Barr, Debbie. (1992) Children of Divorce. Grand Rapids: Zondervan Publishing House.
- Beer, John. (1989). Relationship of Divorce to Self-Concept, Self-Esteem, and Grade Point Average of Fifth and Sixth Grade School Children. Psychological Reports, 65(3), 1379-83.
- Bisnaire, Lise M.C., Firestone, Philip, & Rynard, David. (1990). Factors Associated with Academic Achievement in Children Following Parental Separation. American Journal of Orthopsychiatry, 60(1), 67-76.
- Brubeck, Dan & Beer, John. (1992). Depression, Self-Esteem, Suicide Ideation, Death, And Anxiety and GPA in High School Students of Divorced and Nondivorced Parents. Psychological Reports, 71, 755-63.
- Carlile, Candy. (1991). Children of Divorce. Childhood Education, 67(4), 232-4.
- Cherian, Varghese I. (1989) Academic Achievement of Children of Divorced Parents. Psychological Reports, 64(2), 355-8.
- Cherlin, Andrew J., Furstenberg, Frank F., Chase-Landsdale, L. P., Liernan, K. E., Robins, P. K., Morrison, D. R., & Teitler, O. (1991, June 7). Longitudinal Studies of Effects of Divorced Children in Great Britain and the United States. Science, 252(5011), 1386-9.
- Chethik, Morton, & Doliln, Nancy. (1986). Children and Divorce: The "Negative" Identification. Journal of Divorce, 10(1/2), 121-138.

- Coopersmith, Stanley. (1981). SEI: Self-Esteem Inventories. Palo Alto: Consulting Psychologist Press, Inc.
- Coopersmith, Stanley & Gilbert, Ragnar. (1982). Professional Manual Behavioral Academic Self-Esteem (BASE). Palo Alto: Consulting Psychologist Press, Inc.
- Demo, David & Acock, Alan C. (1988). The Impact of Divorce on Children. Journal of Marriage and the Family, 50(3), 619-48.
- Farmer, Sherry & Galaris, Diana. (1993). Support Groups for Children of Divorce. American Journal of Family Therapy, 21(1), 40-50.
- Furstenberg, Jr., Frank F. & Cherlin, Andrew J. (1991). Divided Families. Cambridge: Harvard University Press.
- Ghiselli, Edwin E., Campbell, John P. & Zedeck, Sheldon. (1981). Measurement Theory for the Behavioral Sciences. San Francisco: W. H. Freeman.
- Gray, Cathleen A. & Shields, Joseph L. (1992) The Development of an Instrument: to Measure the Psychological Response to Separation and Divorce. Journal of Divorce and Remarriage, 17(3/4), 43-56.
- Grych, John H. & Fincham, Frank D. (1992). Interventions for Children of Divorce: Toward Greater Integration of Research and Action. Psychological Bulletin, 111(3), 434-454.
- Guttmann, Joseph. (1993) Divorce in Psychological Perspective: Theory and Research. Hillsdale: Lawrence Erlbaum Associates, Inc.
- Hargreaves, Margaret Barnwell. (1991) Learning Under Stress: Children of Single Parents and the Schools. Metuchen: Women's Action Alliance and the Scarecrow Press, Inc.
- Healy, Joseph M., Stewart, Abibail J., & Copeland, Anne P. (1993). The Role of Self-Blame in Children's Adjustment to Parental Separation. Personality and Social Psychology Bulletin, 19(3), 279-289.
- Hetherington, E. Marvis. (1979). Divorce: A Child's Perspective. American Psychologist, 34(10), 851-858.

- Hetherington, E. Marvis, Stanley-Hagan, Margaret, & Anderson, Edward R. (1989). Marital Transitions: A Child's Perspective. American Psychologist, 44(2), 303-12.
- Hodges, W. F. (1986). Interventions for Children of Divorce. New York: Wiley.
- Hoyt, Lynne A., Cowen, Emory L, Pedro-Carroll, JoAnne L., and Alpert-Gillis. (1990). Anxiety and Depression in Young Children of Divorce. Journal of Clinical Child Psychology, 19(1), 26-32.
- Johnson, Melanie K. & Hutchinson Roger L. (1988/89). Effects of Family Structure on Children's Self-Concepts. Journal of Divorce, 12(2/3), 129-138.
- Kalter, Neil, Pickar, Jeffrey, & Lesowitz, Marsha. (1984). School-Based Developmental Facilitation Groups for Children of Divorce: A Preventive Intervention. American Journal of Orthopsychiatry, 54(4), 613-23.
- Kanoy, Korrel W., & Cunningham, Jo Lynn. (1984). Consensus or Confusion in Research on Children of Divorce: Conceptual and Methodological Issues. Journal of Divorce, 7(4), 45-71.
- Kelly, Joan B., & Wallerstein, Judith S. (1976). The Effects of Parental Divorce: Experiences of the Child in Early Latency. American Journal of Orthopsychiatry, 46(1), 20-32.
- Kinard, E. Milling & Reinherz, Helen. (1986). Effects of Marital Disruption on Children's School Aptitude and Achievement. Journal of Marriage and the Family, 48(1), 285-93.
- Kliewer, Wendy & Sandler, Irwin N. (1993). Social Competence and Coping Among Children of Divorce. American Journal of Orthopsychiatry, 63(3), 432-440.
- Kubler-Ross, Elizabeth. (1969). On Death and Dying. New York: Macmillan.
- Kurdek, L. A. (1987). Children's Adjustment to Parental Divorce: An Ecological Perspective. In J.P. Vincent (Ed.) Advances in Family Intervention, Assessment, and Theory (Vol 4, ppl-31), Greenwich, CT: JAI Press.

- Kurdek, L. A. & Berg, B. (1987). Children's Beliefs About Parental Divorce Scale: Psychometric characteristics and concurrent validity. Journal of Consulting and Clinical Psychology, 55, 712-718.
- Kutz, Linda. (1994). Psychosocial Coping Resources in Elementary School-Age Children of Divorce. American Journal of Orthopsychiatry, 64(4), 554-563.
- Levin, Martin L. (1988/89). Sequel to Marital Disruption in Children. Journal of Divorce, 12(2/3), 25-80.
- Mulholland, Debra Japzon, Watt R., Philpott, Anne, & Narlin, Neil. (1991). Academic Performance in Children of Divorce: Psychological Resilience and Vulnerability. Psychiatry, 54(3), 268-80.
- National Center for Health Statistics. (1996, July 2). Births, Marriages, Divorces and Deaths for 1995. Monthly Vital Statistics Report, 44(12), 1.
- Oppawsky, Jolene. (1991). The Effects of Parental Divorce on Children in West Germany: Emphasis: From the View of Children. Journal of Divorce and Remarriage, 1, 291-304.
- Sanlder, Irwin, Tein, Jeann-Yun, & West, Stephen G. (1994). Coping, Stress, and the Psychological Symptoms of Children of Divorce: A Cross-sectional and Longitudinal Study. Child Development, 65(6), 1744-1763.
- Sandler, Irwin, & Wolchik, Sharlene, (1991). Stability and Quality of Life Events and Psychological Symptomatology in Children of Divorce. American Journal of Community Psychology, 19(4), 501-520.
- Schwartz, Lita Linzer. (1992). Children's Perceptions of Divorce. American Journal of Family Therapy, 20(4), 324-332.
- Seltzer, Judith A. (1994). Consequences of Marital Dissolution for Children. Annual Review of Sociology, 20, 235-66.
- Smith, Thomas Ewin. (1990). Parental Separation and the Academic Self-Concepts of Adolescents: An Effort to Solve the Puzzle of Separation Effects. Journal of Marriage and the Family, 52(1), 107-18.

- Teja, Sameera & Stolberg, Arnold L. (1993). Peer Support, Divorce, and Children's Adjustment. Journal of Divorce and Remarriage, 20(3/4), 45-64.
- Thiessen, Irmgard. (1993). The Impact of Divorce on Children. Early Child Development and Care, 96, 19-26.
- Teyber, Edward. (1992). Helping Children Cope with Divorce. New York: Lexington Books.
- Wadsby, Marie & Svedin, Carl Goran. (1993). Children's Behavior and Mental Health Following Parental Divorce. Journal of Divorce and Remarriage, 20(3/4), 111-138.
- Wallerstein, Judith S. (1983). Children of Divorce: The Psychological Tasks of the Child. American Journal of Orthopsychiatry, 53(2), 234-43.
- Wallerstein, Judith S. (1984). Children of Divorce: Preliminary Report of a Ten-Year Follow-Up of Young Children. American Journal of Orthopsychiatry, 54(3), 444-58.
- Wallerstein, Judith S. (1987). Children of Divorce: Report of a Ten-Year Follow-up of Early Latency-Age Children. American Journal of Orthopsychiatry, 57(2), 199-211.
- Wallerstein, Judith S. (1980). Children of Divorce. Pediatrics in Review, 1(7), 211-7.
- Wallerstein, Judith S., & Corbin, Shauna. (1989) Daughters of Divorce: Report From a Ten-Year Follow-Up. American Journal of Orthopsychiatry, 59(4), 593-604.
- Wallerstein, Judith S., & Kelly, Joan B. (1976). The Effects of Parental Divorce: Experiences of the Child in Later Latency. American Journal of Orthopsychiatry, 46(2), 256-269.
- Wallerstein, Judith S., & Kelly, Joan B. (1980). Surviving the Breakup. New York. Basic Books.
- Walsh, Patricia E., & Stolberg, Arnold L. (1988/89). Parental and Environmental Determinants of Children's Behavioral, Affective and Cognitive Adjustment to Divorce. Journal of Divorce, 12 2-3, 265-282.
- Wyman, Peter A., & Cowen, Emory. (1985). Perceived Competence, Self-Esteem, and Anxiety in Latency Aged Children of Divorce. Journal of Clinical Child Psychology, 14(1), 20-26.

- Yauman, Beth E. (1991). School-based Group Counseling for Children of Divorce: A Review of Literature. Elementary School Guidance and Counseling, 26, 130-138.
- Zaslow, Martha J. (1989). Sex Differences in Children's Response to Parental Divorce: 2. Samples, Variables, Age and Sources. American Journal of Orthopsychiatry, 59(1), 118-41.

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